

C. Executive Summary

Executive Summary of Project for BIP and BTOP:

8. Infrastructure Projects Executive Summary

██████████, ██████████, and ██████████ are three densely populated cities surrounded by rural, less economically developed counties. How do you offer a competitive edge, enhance economic growth, increase accessibility to medical assistance, and level the playing field between metropolitan and rural communities, thereby increasing opportunities in socio-economically impacted populations? In the not-to-distant past, communities thrived by their access to the railroad system. Today, one could make the argument that economic survival is dependent upon high speed internet and inexpensive communication access.

(a.) JOYTEL, through its National Alternative Service Access Network (NASA Net), believes that ██████████ the ██████████ from ██████████ to ██████████ and funneling smaller carriers into these rural, underserved areas would increase accessibility and potentially expand economic growth. Tier 2 and Tier 3 communication providers will no longer incur the prohibitive transport costs and will be able to pass these savings along to the local, underserved communities throughout our predefined area. With lower costs, purchase of communication services would increase. Furthermore, with the repurposing of our ██████████ facility, ██████████ will go from a Tier 2 city to a Tier 1. This is necessary for the economic development of the city. ██████████ is the ██████████th most populated city in the nation, but currently it has a ██████████% unemployment rate, a downtown area that is empty and property that is vacant. With a Tier 1 communication capacity, the infrastructure would make the area more attractive to business interests.

The creation of NASA Net will increase access to medical accessibility through such methods as telemedicine, teleradiology, and other advances in telepresence. The Broadband Cloud technology JOYTEL has developed encompasses our [REDACTED] central hubs, [REDACTED], [REDACTED], and [REDACTED]. These sites will contain Broadband Cluster Units (BCU) for rent within the Broadband Cloud. JOYTEL will provide a Broadband Cloud on a dedicated network for critical research to [REDACTED] University ([REDACTED]) and University [REDACTED] ([REDACTED]) amounting to over [REDACTED] in donated services over the course of the five years grant reporting period and the donation continuing on until they choose to terminate the service, with no obligation. Letters of support are attached and efforts are underway to offer the same to [REDACTED] of [REDACTED] ([REDACTED]), in [REDACTED], [REDACTED].

The American Recovery and Reinvestment Act (AARA) encourages making medical records electronically available. The HITECH Act gives medical providers a monetary incentive to adopt meaningful electronic health records transfer capability. JOYTEL will donate connectivity on its Medical Access Service Hub (MASH) to assist physicians, hospitals, and other medical facilities in meeting this goal. Since NASA Net supports MASH, at least [REDACTED] of the Broadband Cloud will be dedicated to any medical facilities able to interconnect at any of our [REDACTED] Points of Presence (POP) on a first come first serve basis, providing those sites a safe storage and exchange instrument for MASH on our Broadband Clouds internal lightwave. NASA Net also supports Disaster Recovery for governmental and community anchors and donate [REDACTED] of the Broadband Cloud connectivity for any community anchor able to interconnect at any of our [REDACTED] POP's, on a first come first serve basis. These [REDACTED] Broadband Clouds will be fault tolerant, ensuring that should another tragedy like hurricane Katrina occur, no hospital, city or community anchors, will lose access to their data records.

(b.& c.) NASA Net middle mile span encompasses service areas between [REDACTED] and [REDACTED] with a population of nearly 8 million people and nearly 1 million businesses. NASA Net will actively encourage diverse competition for the technology needs of the region by delivering [REDACTED] from [REDACTED] and [REDACTED] to approximately 345 miles covering 2,349 square miles of rural and underserved service areas. These [REDACTED] POPS are in 14 counties, 5 of which are in rural and underserved service areas. The potential also exists for an upturn in jobs by putting the communication infrastructure in place that companies need to conduct business.

(d.) NASA NET will identify and partner with educational, medical, local governments and

community anchors to offer them free DR (Disaster Recovery) by providing them space on our Broadband Cloud within the ● POP's. There are approximately ● entities within the NASA Net service areas. ● letters of support from organizations are included in the attachments. Additionally, community anchors not a part of our free DR or MASH program can subscribe to NASA Net at a discounted rate of ● off our fee charged to the public and other service providers.

(e.) This funding request is strictly infrastructure related. NASA Net, through its ● POP sites, ● the ● along the Southeast allowing for competition in the smaller currently underserved communities by providing transport and dedicated internet access to the last mile carrier.

(f.) NASA Net will act as a ● bringing expanded internet backbone service to the Southeast area covered by the NASA Net. With this capacity increase, JOYTEL will equalize the playing field for all business outside Tier 1 markets removing the barriers that currently exist. NASA Net will create an open infrastructure to allow ● to operate in all rural and underserved communities between ● and ●. Furthermore, JOYTEL will abide by its policy of non discrimination, and prominently display this policy on its website.

(g.) The proposed services are low cost ● for ● internet providing ● to ● access to last mile providers. Our target market will be ISP's, WISP's, CLECS, Public Safety Entities, Governments, both Local and Federal, and Community Anchors. Services are not limited to small or large business. The type of broadband system that will be deployed is completely ●. Best of all, since JOYTEL will have ● major sites, if a disaster hits one site, the diversity between locations will ensure uninterrupted service to all ● POP's from ● to ●.

(h.) The success of this project resides in the ability of its team. NASA Net's core team consists of bright and creative talent that has already proven itself in the industry. Technical direction of NASA Net will primarily be driven by JOYTEL CEO/President Mark Marques. Mr. Marques' company provides ● and ● internet access, data center services and IT services to a variety of businesses, municipal and educational customers. This background is

required in the design and implementation of [REDACTED] the [REDACTED] establishing the [REDACTED] POP sites, and providing the commercial service that will sustain this model. Administrative deliverables, such as billing, will be through Jahan Babadi, President of Sun-Tel USA. Mr. Babadi has over 11 years of experience in negotiating contracts and working with the underserved. Richard Alvarez, formerly of [REDACTED] Enterprises, will serve as Broadband Cloud Manager for JOYTEL. Mr. Alvarez has experience in project and team management, developing custom control panels, operation of [REDACTED] [REDACTED] ([REDACTED]) [REDACTED] and testing and deployment of platform solutions.

(I.) The infrastructure costs for this project is \$ [REDACTED] The number of households along our [REDACTED] POPs that will benefit from this infrastructure is 3,060,717. See Budget Attachments.

(j.) JOYTEL estimates that total subscribers for all services will be [REDACTED] subscribers by year one and [REDACTED] subscribers by year five. Projections are based on early interest and real world business projections of JOYTEL and its partners.

(k.) As previously stated, it is the intention of NASA Net to give smaller communities the infrastructure they need for economic growth. JOYTEL believes that expanding open architecture to all carriers in all communities will stimulate competitive growth which further reduces the number of underserved/unserved communities. In this technology fueled age, we will close the digital divide thereby fostering the proliferation of information services industry along the entire NASA Net, spurring the [REDACTED] progression of nontechnical industries to technology driven information services needed in today's market. In these tough economic times this proposal will protect and provide job security for at least 16 positions with our various vendors identified through this grant. On a more personal scale, JOYTEL will hire 29 employees over the course of the project.

Should NTIA award this project, JOYTEL will be providing a key to a previously unlocked door. This regional endeavor will unlock potential for its residents to enjoy the benefits that come with information technology innovations at levels similar to those currently enjoyed only by major metropolitan areas. The economic success of this region through the 21st century depends on it.